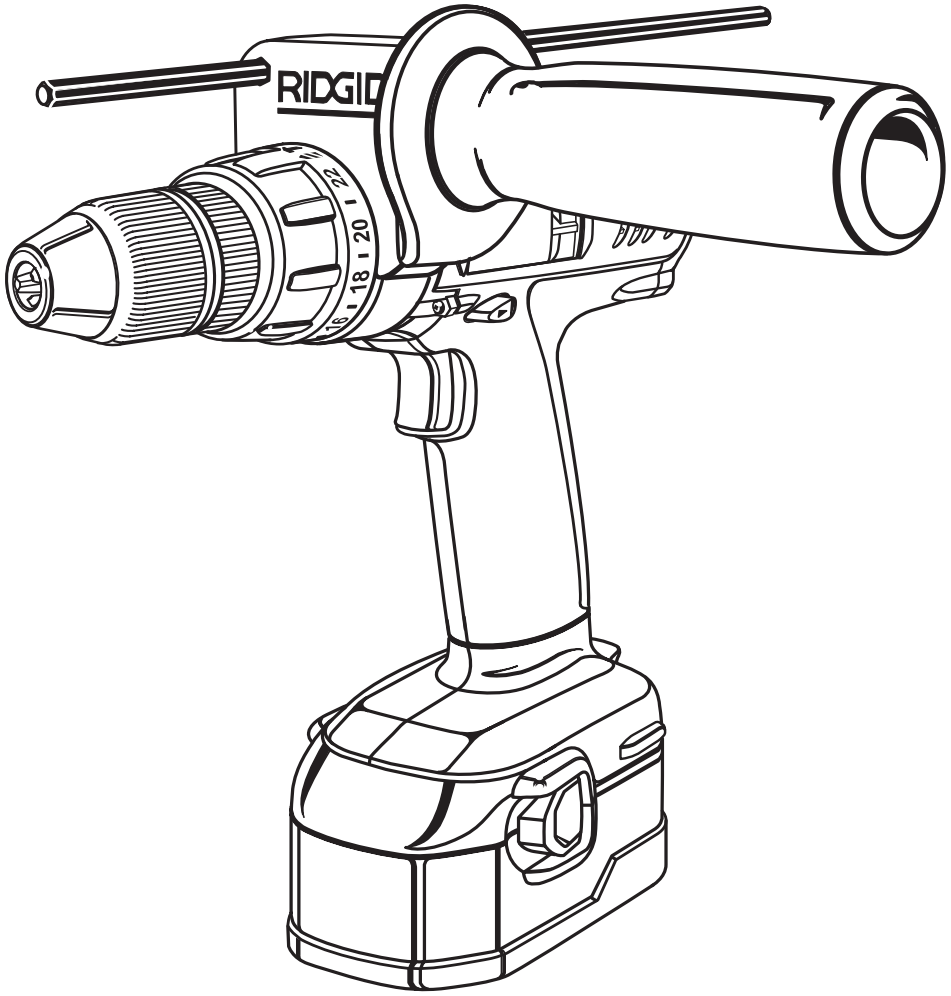
OPERATOR'S MANUAL

1/2 in. 18 VOLT HAMMER DRILL TWO SPEED / REVERSIBLE

R841150



Your Hammer Drill has been engineered and manufactured to our high standards for dependability, ease of operation, and operator safety. When properly cared for, it will give you years of rugged, trouble-free performance.

⚠ WARNING:
To reduce the risk of injury, the user must read and understand the operator's manual before using this product.

Thank you for buying a RIDGID product.

SAVE THIS MANUAL FOR FUTURE REFERENCE

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INTRODUCTION

The 18 Volt Cordless Hammer Drill has many features for making the use of this product more pleasant and enjoyable. Safety, performance, and dependability have been given top priority in the design of this product making it easy to maintain and operate.

⚠ WARNING:

Do not attempt to use this product until you thoroughly read and completely understand the operator's manual. Pay close attention to the safety rules, including Dangers, Warnings, and Cautions. If you use your product properly and only as intended, you will enjoy years of safe, reliable service.

Look for this symbol to point out important safety precautions. It means attention!!! Your safety is involved.

⚠ WARNING:

The operation of any tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning operation, always wear safety goggles or safety glasses with side shields and a full face shield when needed. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always wear eye protection which is marked to comply with ANSI Z87.1.

GENERAL SAFETY RULES

⚠ WARNING!

Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS

Work Area

- **Keep your work area clean and well lit**. Cluttered benches and dark areas invite accidents.
- **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
- **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control.

Electrical Safety

- **A battery operated tool with integral batteries or a separate battery pack must be recharged only with the specified charger for the battery.** A charger that may be suitable for one type of battery may create a risk of fire when used with another battery.
- **Use battery operated tool only with specifically designated battery pack.** Use of any other batteries may create a risk of fire.
- **Use battery only with charger listed.**

MODEL	BATTERY PACK	CHARGER
R841150	130254003	140276002
		140276001

- **Do not abuse the cord. Never use the cord to carry the charger. Keep cord away from heat, oil, sharp edges, or moving parts. Replace damaged cords immediately.** Damaged cords may create a fire.

Personal Safety

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
- **Avoid accidental starting. Be sure switch is in the locked or off position before inserting battery pack.** Carrying tools with your finger on the switch or inserting the battery pack into a tool with the switch on invites accidents.
- **Remove adjusting keys or wrenches before turning the tool on.** A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enable better control of the tool in unexpected situations.
- **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.
- **Do not wear loose clothing or jewelry. Contain long hair.** Loose clothes, jewelry, or long hair can be drawn into air vents.
- **Do not use on a ladder or unstable support.** Stable footing on a solid surface enables better control of the tool in unexpected situations.

Tool Use and Care

- **Use clamps or other practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
- **Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
- **Do not use tool if switch does not turn it on or off.** A tool that cannot be controlled with the switch is dangerous and must be repaired.
- **Disconnect battery pack from tool or place the switch in the locked or off position before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
- **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- **When battery pack is not in use, keep it away from other metal objects like: paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another.** Shorting the battery terminals together may cause sparks, burns, or a fire.
- **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.
- **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
- **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may create a risk of injury when used on another tool.
- **Keep the tool and its handle dry, clean and free from oil and grease.** Always use a clean cloth when cleaning. Never use brake fluids, gasoline, petroleum-based products, or any strong solvents to clean your tool. Following this rule will reduce the risk of loss of control and deterioration of the enclosure plastic.

GENERAL SAFETY RULES

Service

- **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel may result in a risk of injury.
- **When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual.** Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of shock or injury.

SPECIFIC SAFETY RULES

- **Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring.** Contact with a "live" wire will also make exposed metal parts of the tool "live" and shock the operator.

Additional Rules For Safe Operation

- **Know your power tool. Read operator's manual carefully. Learn its applications and limitations, as well as the specific potential hazards related to this tool.** Following this rule will reduce the risk of electric shock, fire, or serious injury.
- **Always wear safety glasses with side shields.** Everyday glasses have only impact resistant lenses. They are NOT safety glasses. Following this rule will reduce the risk of eye injury.

Important Rules for Battery Tools

- **Battery tools do not have to be plugged into an electrical outlet; therefore, they are always in operating condition. Be aware of possible hazards when not using your battery tool or when changing accessories.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Do not place battery tools or their batteries near fire or heat.** This will reduce the risk of explosion and possibly injury.
- **WARNING:** Batteries vent hydrogen gas and can explode in the presence of a source of ignition, such as a pilot light. To reduce the risk of serious personal injury, never use any cordless product in the presence of open flame. An exploded battery can propel debris and chemicals. If exposed, flush with water immediately.
- **Do not charge battery tool in a damp or wet location.** Following this rule will reduce the risk of electric shock.
- **For best results, your battery tool should be charged in a location where the temperature is more than 50°F but less than 100°F. Do not store outside or in vehicles.**
- **Under extreme usage or temperature conditions, battery leakage may occur. If liquid comes in contact with your skin, wash immediately with soap and water, then neutralize with lemon juice or vinegar. If liquid gets into your eyes, flush them with clean water for at least 10 minutes, then seek immediate medical attention.** Following this rule will reduce the risk of serious personal injury.

IMPORTANT SAFETY INSTRUCTIONS FOR CHARGER

⚠ WARNING:

Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

- **Never use a battery that has been dropped or received a sharp blow.** A damaged battery is subject to explosion. Properly dispose of a dropped battery immediately. Failure to heed this warning can result in serious personal injury.
- **Save these instructions. This manual contains important safety and operating instructions for charger.**
- **Before using battery charger, read all instructions and cautionary markings in this manual, on battery charger, and product using battery charger.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **CAUTION: To reduce risk of injury, charge only nickel-cadmium type rechargeable batteries. Other types of batteries may burst causing personal injury and damage.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Do not expose charger to wet or damp conditions.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Use of an attachment not recommended or sold by the battery charger manufacturer may result in a risk of fire, electric shock, or injury to persons.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **To reduce risk of damage to charger body and cord, pull by charger plug rather than cord when disconnecting charger.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.** Following this rule will reduce the risk of serious personal injury.
- **Do not abuse cord. Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.** Following this rule will reduce the risk of electric shock or fire.
- **An extension cord should not be used unless absolutely necessary.** Use of improper extension cord could result in a risk of fire and electric shock. If extension cord must be used, make sure:
  a. That pins on plug of extension cord are the same number, size and shape as those of plug on charger.
  b. That extension cord is properly wired and in good electrical condition; and
  c. That wire size is large enough for AC ampere rating of charger as specified below:

Cord Length (Feet)	25'	50'	100'
Cord Size (AWG)	16	16	16

Note: AWG = American Wire Gage

- **Do not operate charger with a damaged cord or plug. If damaged, have replaced immediately by a qualified serviceman.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a qualified serviceman.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Do not disassemble charger; take it to a qualified serviceman when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **To reduce the risk of electric shock, unplug charger from outlet before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Disconnect charger from power supply when not in use.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Save these instructions. Refer to them frequently and use them to instruct others who may use this tool. If you loan someone this tool, loan them these instructions also.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.

⚠ WARNING:

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

SAVE THESE INSTRUCTIONS

SYMBOLS

Important: Some of the following symbols may be used on this tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

SYMBOL	NAME	DESIGNATION/EXPLANATION
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
min	Minutes	Time
~	Alternating Current	Type of current
⎓	Direct Current	Type or a characteristic of current
n_0	No Load Speed	Rotational speed, at no load
⧈	Class II Construction	Double-insulated construction
.../min	Per Minute	Revolutions, strokes, surface speed, orbits etc., per minute
	Safety Alert	Precautions that involve your safety
	Read The Operator's Manual	To reduce the risk of injury, the user must read and understand the operator's manual before using this product.
	Eye Protection	Always wear safety goggles or safety glasses with side shields and a full face shield when operating this product.
	Wet Conditions Alert	Do not expose to rain or use in damp locations.

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and the explanations with them, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

SYMBOL	MEANING
	DANGER: Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
	WARNING: Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
	CAUTION: Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices that may cause property damage.
Note:	Advises you of additional information concerning the operation or maintenance of the equipment.

FEATURES

SPECIFICATIONS

Chuck	1/2 in. (13 mm) Keyless
Motor	18 Volt DC
Switch	Variable Speed
Gear Train	2 Speed
No Load Speed	
Drill Speed	0-400/0-1600/min.
Hammer Speed	0-6400 / 0-25,600/min.
Clutch	24 Positions
Charger Input	120 V, 60 Hz, AC only
Charge Rate	30 minutes
Torque	580 in.lb.

Before using this tool, familiarize yourself with all operating features and safety requirements. However, do not let familiarity with the tool make you careless.

This new hammer drill is equipped with the following features. *See Figure 1.*

KEYLESS CHUCK

The hammer drill has a keyless chuck that allows you to hand tighten or release drill bit in the chuck jaws.

SWITCH

The hammer drill has a conveniently located variable speed switch.

SWITCH LOCK

The switch trigger can be locked in the **OFF** (Center Lock) position. This feature helps reduce the possibility of accidental starting when not in use.

TWO SPEED GEAR TRAIN

The hammer drill has a two-speed gear train designed for drilling or driving at **LO (1)** or **HI (2)** speeds. A slide switch is located on top of your drill to select either **LO (1)** or **HI (2)** speed.

FORWARD/REVERSE SELECTOR
(DIRECTION OF ROTATION SELECTOR)

The hammer drill has a forward/reverse selector located above the switch trigger.

AUXILIARY HANDLE

This drill is equipped with an auxiliary handle for ease of operation and to prevent loss of control.

DEPTH GAUGE ROD

A depth gauge rod has been supplied with your hammer drill to assist in controlling the depth of drilled holes.

BIT STORAGE

When not in use, bits provided with the hammer drill can be placed in the storage area located on the rear of the motor housing.

CHARGER

The dual port charger fast-charges two batteries at once. It is equipped with a fan that brings hot batteries to optimum charging temperature for more efficient charging and longer battery life. The charger has a “key hole” hanging feature for convenient, space saving storage. Screws should be installed so that center distances are 4-1/8 inches apart.

FEATURES

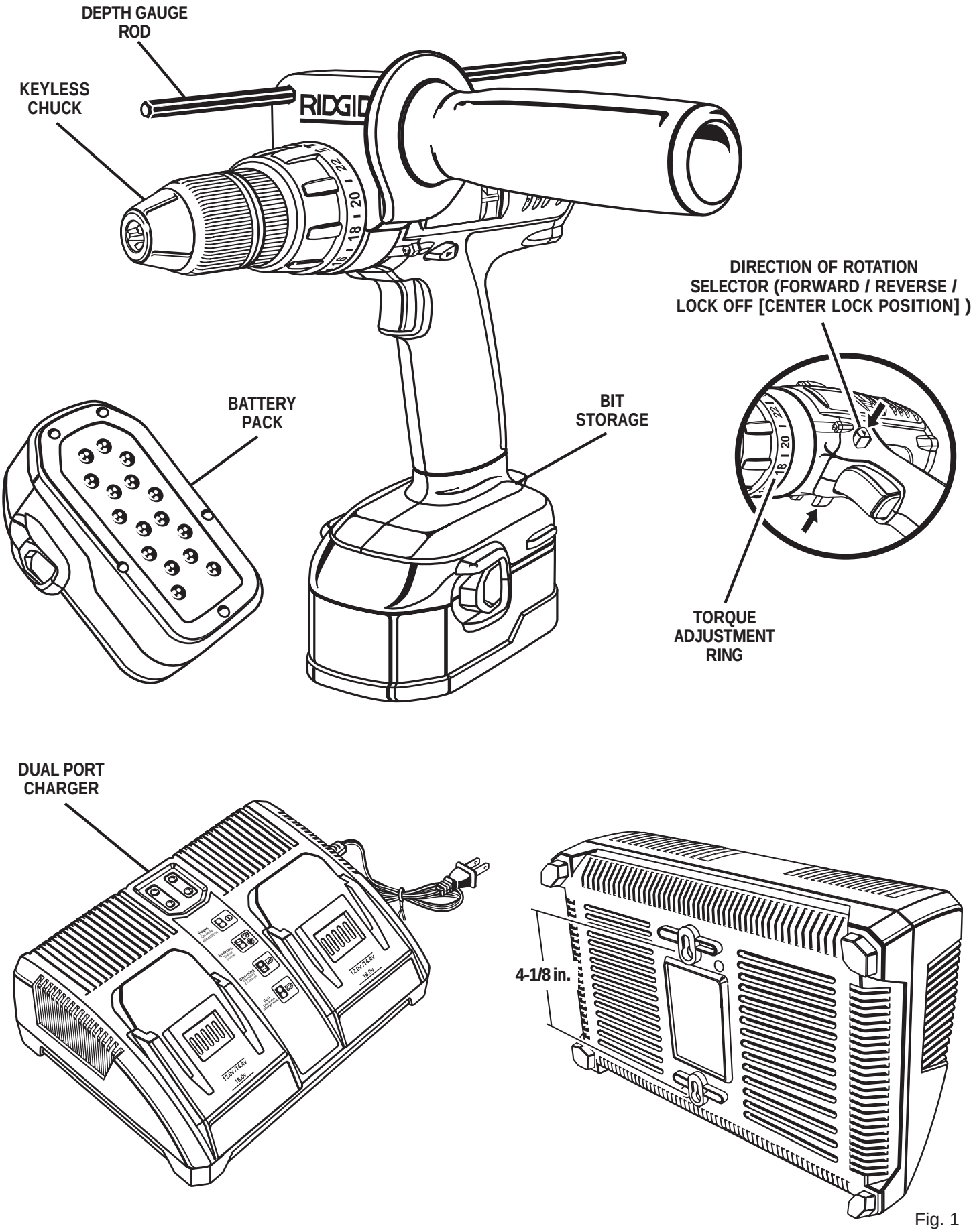

Fig. 1

UNPACKING

Instructions

When unpacking the tool:

- Carefully remove the tool and accessories from the box.
- Make sure that all items listed in the packing list are included.
- Inspect the tool carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.
- If any parts are damaged or missing, please call 1-866-539-1710 for assistance.

Packing List

1/2 in. (13 mm) Two Speed Hammer Drill

Charger

Battery Pack (2)

Auxiliary Handle

Double-ended Bit

Operator's Manual

⚠ WARNING:
If any parts are missing do not operate the tool until the missing parts are replaced. Failure to do so could result in possible serious personal injury.

OPERATION

⚠ WARNING:

Do not allow familiarity with the hammer drill to make you careless. Remember that a careless fraction of a second is sufficient to inflict severe injury.

CHARGING BATTERY PACK

The battery pack for this tool has been shipped in a low charge condition to prevent possible problems. Therefore, you should charge it until the light on front of charger changes from flashing green to continuous green.

Note: Batteries will not reach full charge the first time they are charged. Allow several cycles (drilling followed by recharging) for them to become fully charged. This is normal for nickel-cadmium batteries.

TO CHARGE

- Charge battery pack only with the charger provided.
- **Make sure power supply is normal house voltage, 120 volts, 60 Hz, AC only.**
- Connect the charger to a power supply.
- Attach battery pack to charger by aligning raised ribs on battery pack with grooves in charger, then slide battery pack onto charger. *See Figure 2.*
- After normal usage, 30 minutes of charging time is required to be fully charged.
- The battery pack will become slightly warm to the touch while charging. This is normal and does not indicate a problem.
- **Do not** place charger in an area of extreme heat or cold. It will work best at normal room temperature.
- When the batteries become fully charged, unplug your charger from power supply and remove the battery pack.

IMPORTANT INFORMATION FOR RECHARGING HOT BATTERY PACK

When using this drill continuously, the batteries in the battery pack will become hot. The battery pack for this tool will charge more rapidly and efficiently when at a cooled temperature.

The internal fan for this charger will automatically turn on when a hot battery pack is inserted. Air circulates through the battery, bringing it to optimum charging temperature, decreasing the time required to begin fast charging the pack, and extending the life of the battery.

When the battery pack becomes discharged and is hot, the green LED will be off and the red LED will begin flashing.

When the battery pack cools down to approximately 104°F (40°C), the charger will automatically begin fast charge mode.

If the Red LED continues to flash for more than 90 minutes, and the green LED remains off, this may indicate a damaged battery that will not charge.

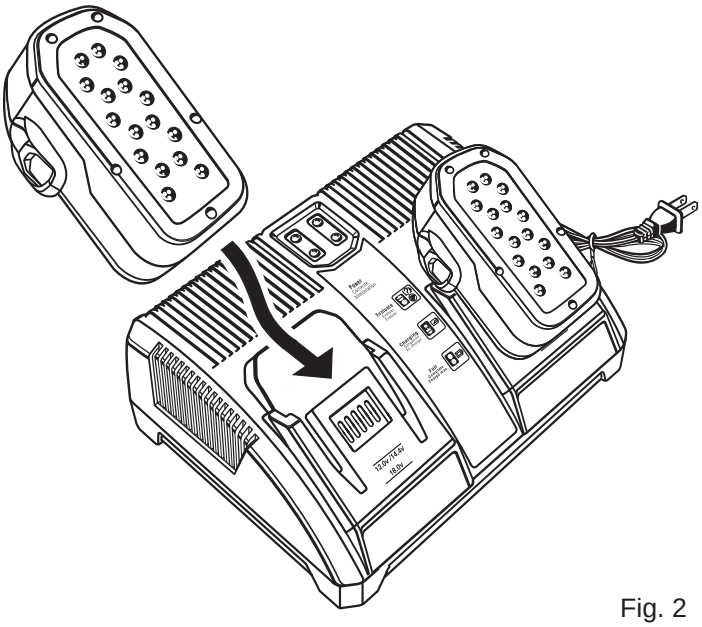

Fig. 2

IMPORTANT INFORMATION FOR RECHARGING COOL BATTERY PACK

If battery pack is below normal temperature range, the red LED will begin flashing and the green LED will be off. When the battery warms to a temperature of more than 41°F (5°C), the charger will automatically begin fast charge mode.

Note: Refer to **"CHARGING BATTERY PACK"** for normal recharging of batteries. If the charger does not charge your battery pack under normal circumstances, return **both** the battery pack and charger to your nearest repair center for electrical check. For the location of your nearest repair center, please call 1-866-539-1710.

KEEPING THE CHARGER VENTS CLEAN

The fan in this charger will perform more efficiently if the air vents and ports are kept free of dust or other debris. Periodically check the air vents, and using a fine brush, whisk dust or debris away from the air vents and ports.

⚠ CAUTION:

To prevent damage to battery pack, remove battery pack from charger immediately if no LED comes on. Return battery pack and charger to your nearest service center for checking or replacing. Also, if you are removing battery pack from charger and no LEDs are on, return both battery pack and charger to your nearest service center. Do not insert another battery pack into charger. A damaged charger may damage a battery pack.

OPERATION

LED FUNCTION OF CHARGER

See Figure 3.

LED INDICATOR		BATTERY PACK	RED LED	GREEN LED	ACTION
Power Corriente Alimentation	Power	Without battery pack	ON	OFF	Ready to charge battery pack
Evaluate Evaluar Evaluer	Evaluate	Hot battery pack	Flashing	OFF	When battery pack reaches cooled temperature, charger begins fast charge mode
	Evaluate	Cold battery pack	Flashing	OFF	When battery pack reaches warmed temperature, charger begins fast charge mode
	Evaluate	Deeply discharged	Flashing	OFF u	Charger pre-charges battery ntil normal voltage is reached, then begins fast charge mode
	Evaluate	Thermistor shorted or open	Flashing	OFF	If red LED continues flashing for more than 90 minutes, and green LED remains off, this may indicate a damaged battery
Charging Cargando En charge	Charging	Fast charging	ON	Flashing	Fast charges in 30 minutes
Full Completo Charge max.	Full	Slow charging	OFF	ON	Fast charging is complete. Charger maintains charge mode.

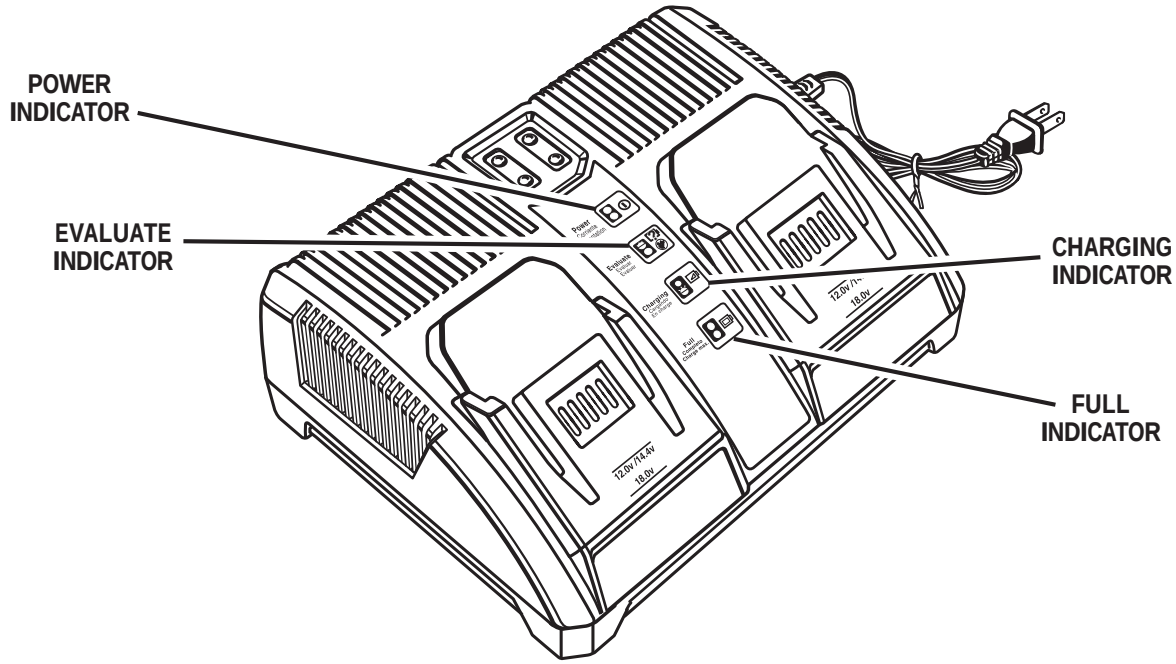

Fig. 3

OPERATION

TO INSTALL BATTERY PACK

- Lock the switch trigger on the drill by placing the direction of rotation (forward-reverse) selector in center position. *See Figure 4.*
- Place battery pack in the drill. Align raised rib on battery pack with the groove inside the drill. *See Figure 5.*
- Make sure the latches on each side of your battery pack snap in place and battery pack is secured in the drill before beginning operation.

⚠ CAUTION:

When placing battery pack in the tool, be sure raised rib on battery pack aligns with the slide on the bottom of the drill and latches snap into place properly. Improper assembly of the battery pack can cause damage to internal components.

TO REMOVE BATTERY PACK

- Lock the switch trigger on the drill by placing the direction of rotation selector in center position. *See Figure 4.*
- Locate latches on side of battery pack and depress to release battery pack from the drill. *See Figure 5.*
- The battery pack will automatically disconnect in direction to be removed when buttons are depressed.
- Remove the battery pack from your drill.

APPLICATIONS

You may use the two speed drill for the purposes listed below:

- Drilling in wood
- Drilling in ceramics, plastics, fiberglass, and laminates
- Drilling in both hard and soft metals
- Using driving accessories, such as driving screws with screwdriver bits
- Mixing paints
- Hammer drilling in concrete and masonry.

SWITCH

See Figure 6.

To turn your drill **ON**, depress the switch trigger. To turn it **OFF**, release the switch trigger.

VARIABLE SPEED

See Figure 6.

This tool has a variable speed switch that delivers higher speed and torque with increased trigger pressure. Speed is controlled by the amount of switch trigger depression.

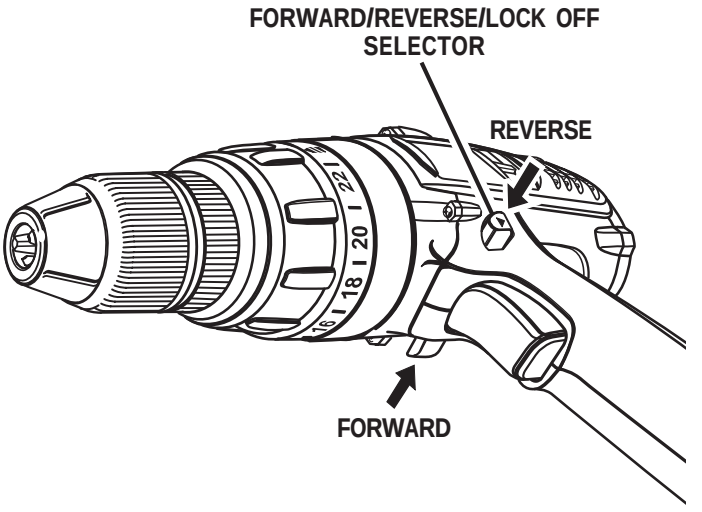

Fig. 4

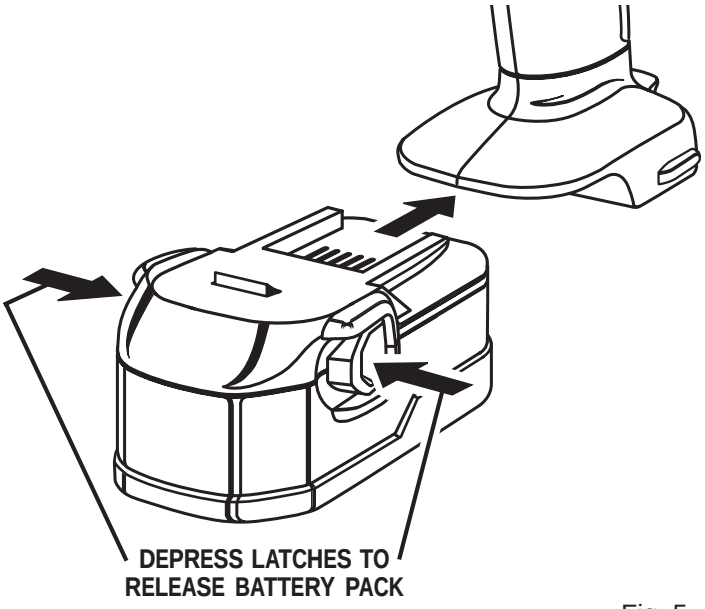

Fig. 5

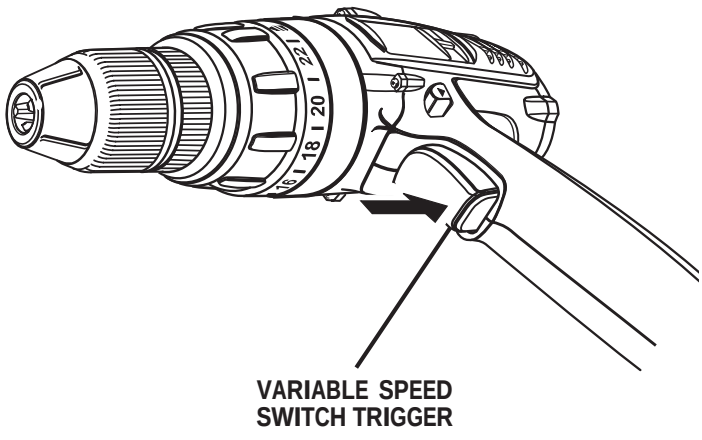

Fig. 6

OPERATION

This drill has an electric brake. When the trigger switch is released, the chuck stops turning. When the brake is functioning properly, sparks will be visible through the vent slots on the housing. This is normal and is the action of the brake.

Note: You might hear a whistling or ringing noise from the switch during use. Do not be concerned, this is a normal part of the switch function.

REVERSIBLE

See Figure 4.

This tool has the feature of being reversible. The direction of rotation is controlled by a selector located above the switch trigger. With the drill held in normal operating position, the direction of rotation selector should be positioned to the left of the switch for drilling. The drilling direction is reversed when the selector is to the right of the switch. When the selector is in center position, the switch trigger is locked.

⚠ CAUTION:

To prevent gear damage, always allow chuck to come to a complete stop before changing the direction of rotation or the two speed gear train (hi-lo).

To stop, release switch trigger and allow the chuck to come to a complete stop.

TWO-SPEED GEAR TRAIN

See Figure 7.

Your drill has a two-speed gear train designed for drilling or driving at **LO (1)** or **HI (2)** speeds. A slide switch is located on top of your drill to select either **LO (1)** or **HI (2)** speed. When using drill in the **LO (1)** speed range, speed will decrease and unit will have more power and torque. When using drill in the **HI (2)** speed range, speed will increase and unit will have less power and torque. Use **LO (1)** speed for high power and torque applications and **HI (2)** speed for fast drilling or driving applications.

AUXILIARY HANDLE

See Figure 8.

An auxiliary handle is packed with the drill for ease of operation and to help prevent loss of control.

To use the auxiliary handle:

- Open the clamping ring by turning the handle counterclockwise.
- Slide the ring of the auxiliary handle onto the spindle collar of the machine.
- Tighten the auxiliary handle at the desired angle by turning the handle clockwise.

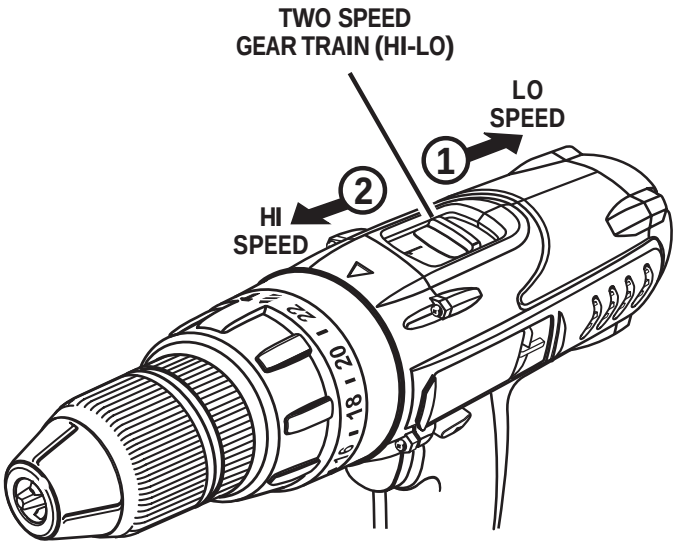

Fig. 7

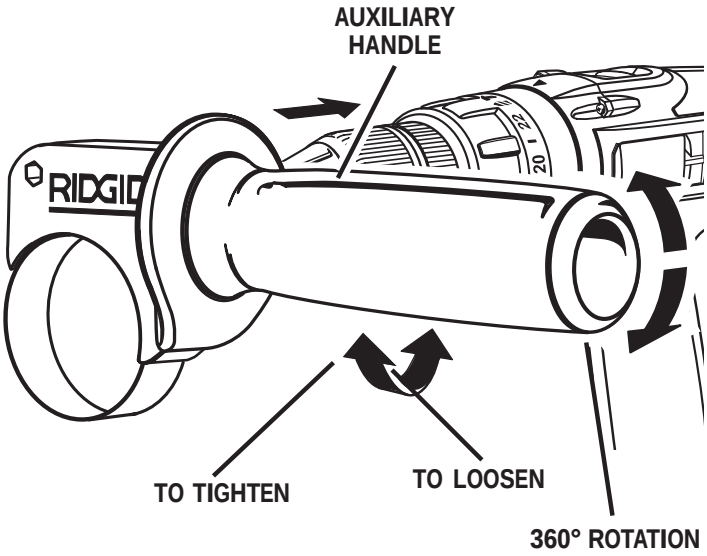

Fig. 8

Note: For convenience the screw has been trapped inside the auxiliary handle.

To prevent thread damage and possible loss of control, the auxiliary handle should be checked periodically for tightness. Do not operate the drill with the handle loose.

OPERATION

INSTALLING BITS

See Figures 9 and 10.

- Lock the switch trigger by placing the direction of rotation selector in center position. *See Figure 4.*
- Open or close chuck jaws to a point where the opening is slightly larger than the bit size you intend to use. Also, raise the front of the drill slightly to keep the bit from falling out of the chuck jaws.
- Insert drill bit straight into chuck the full length of the jaws as shown in figure 10.
- Tighten the chuck jaws on the drill bit.
- To tighten the chuck jaws on drill bit; grasp and hold the collar of the chuck with one hand, while rotating the chuck body with your other hand.

  Note: Rotate the chuck body in the direction of the arrow marked **LOCK** to tighten chuck jaws.
- **Do not** use a wrench to tighten or loosen the chuck jaws.

⚠ WARNING:

Make sure to insert drill bit straight into chuck jaws. Do not insert drill bit into chuck jaws at an angle then tighten, as shown in Figure 9. This could cause drill bit to be thrown from drill, resulting in possible serious personal injury or damage to the chuck.

REMOVING BITS

See Figure 9.

- Lock the switch trigger by placing the direction of rotation selector in center position. *See Figure 4.*
- Loosen the chuck jaws from the drill bit.
- To loosen: grasp and hold the collar of the chuck with one hand, while rotating chuck body with your other hand. **Note:** Rotate chuck body in the direction of the arrow marked **UNLOCK** to loosen chuck jaws.
- **Do not** use a wrench to tighten or loosen the chuck jaws.
- Remove the drill bit from the chuck jaws.

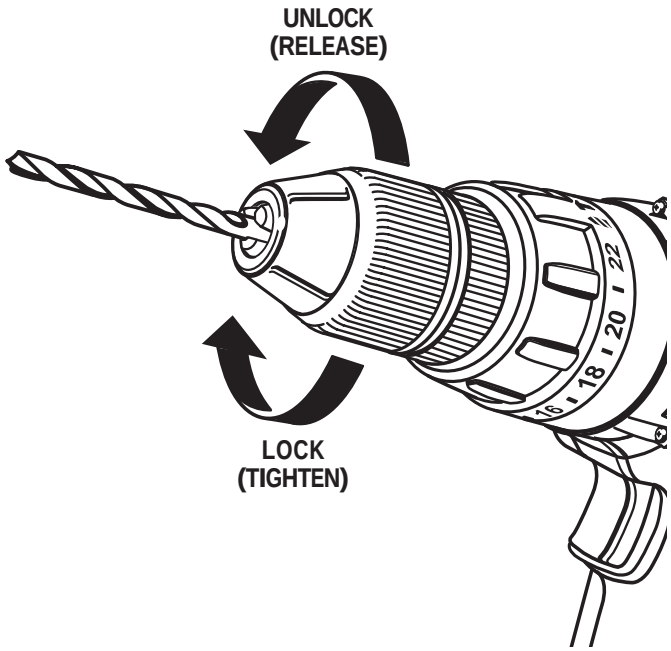

Fig. 9

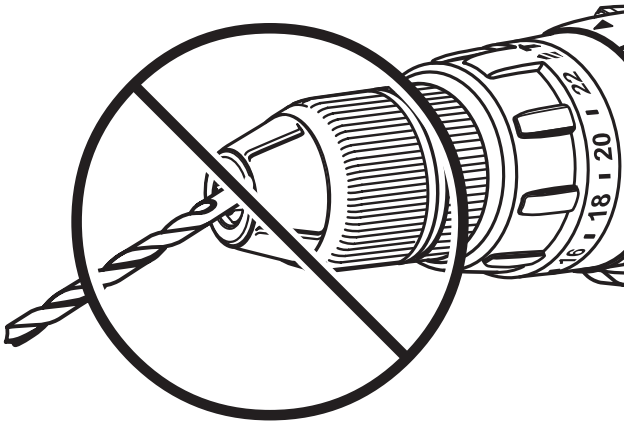

Fig. 10

OPERATION

INSTALLING DEPTH GAUGE ROD

See Figures 11 and 12.

A depth gauge rod has been packed with your hammer drill to assist you in controlling the depth of drilled holes.
When drilling holes with the depth gauge rod installed, the desired hole depth has been reached when the end of the rod comes in contact with the surface of the material being drilled.
Follow these steps to install and adjust the depth gauge rod.

1. Loosen the auxiliary handle.
2. Insert the depth gauge rod through hole on the auxiliary handle.
3. Adjust the depth gauge rod so that the drill bit extends beyond the end of the rod to the required drilling depth.
4. Tighten the auxiliary handle securely. This secures the depth gauge rod at the desired depth of cut. It also secures the auxiliary handle.

ADJUSTABLE TORQUE CLUTCH

This drill is equipped with an adjustable torque clutch for driving different types of screws into different materials. The proper setting depends on the type of material and the size of screw you are using.

TO ADJUST TORQUE

- Identify the twenty four torque indicator settings located on the front of the drill. *See Figure 13.*
- Rotate adjusting ring to the desired setting.
  - 1 - 4 For driving small screws.
  - 5 -8 For driving screws into soft material.
  - 9 -12 For driving screws into soft and hard materials.
  - 13 -16 For driving screws in hard wood.
  - 17 - 20 For driving large screws.
  - 21 - 23 ( ) For heavy drilling.
  - For hammer drilling.

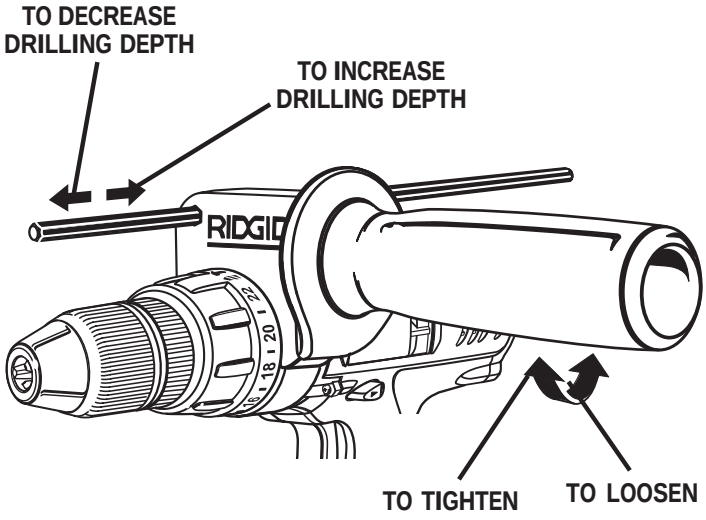

Fig. 11

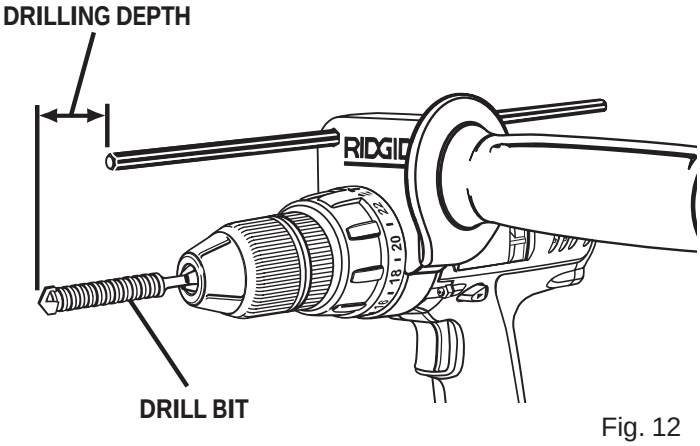

Fig. 12

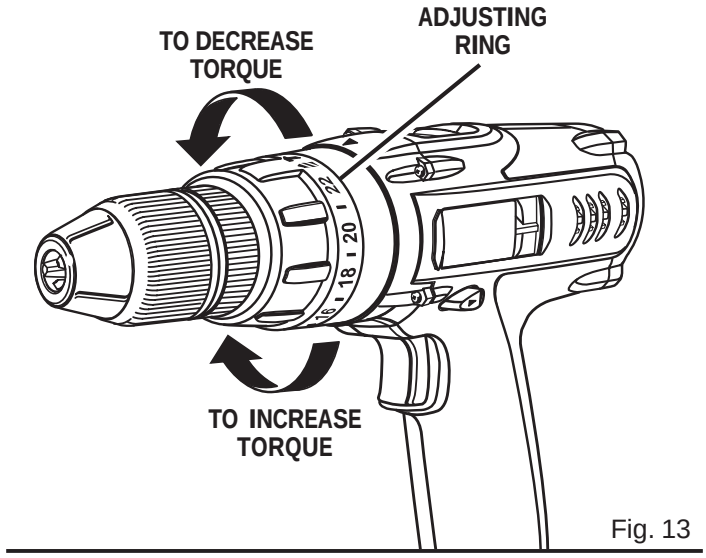

Fig. 13

OPERATION

BIT STORAGE

See Figure 14.

When not in use, the bit provided with this drill can be placed in the storage area located on the rear of the drill.

⚠ WARNING:

Always wear eye protection marked to comply with ANSI Z87.1. Failure to do so could result in dust, shavings, or loose particles being thrown into your eyes, resulting in possible serious injury.

DRILLING

See Figure 15.

When drilling hard smooth surfaces use a center punch to mark desired hole location. This will prevent the drill bit from slipping off center as the hole is started. However, the low speed feature allows starting holes without center punching if desired. To accomplish this, simply operate the drill at a low speed until the hole is started.

The material to be drilled should be secured in a vise or with clamps to keep it from turning as the drill bit rotates.

Hold tool firmly and place the bit at the point to be drilled. Depress the switch trigger to start tool.

Move the drill bit into the workpiece applying only enough pressure to keep the bit cutting. Do not force or apply side pressure to elongate a hole.

⚠ WARNING:

Be prepared for binding or bit breakthrough. When these situations occur, drill has a tendency to grab and kick opposite to the direction of rotation and could cause loss of control when breaking through material. If not prepared, this loss of control can result in possible serious injury.

When drilling metals, use a light oil on the drill bit to keep it from overheating. The oil will prolong the life of the bit and increase the drilling action.

If the bit jams in workpiece or if the drill stalls, release switch trigger immediately. Remove the bit from the workpiece and determine the reason for jamming.

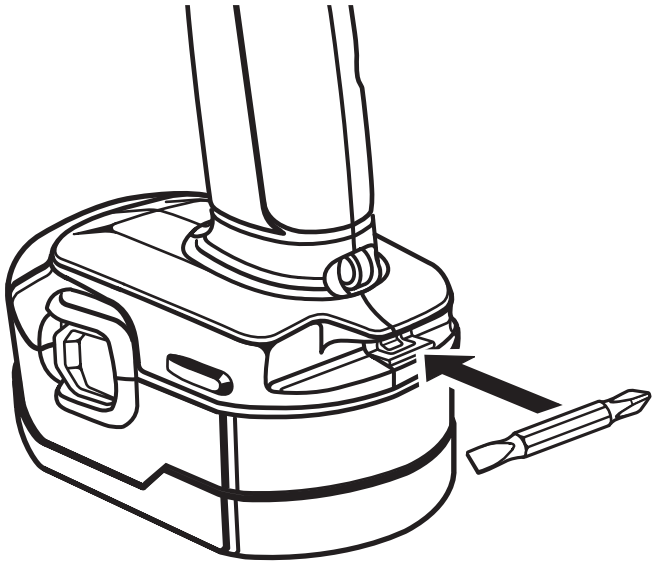

Fig. 14

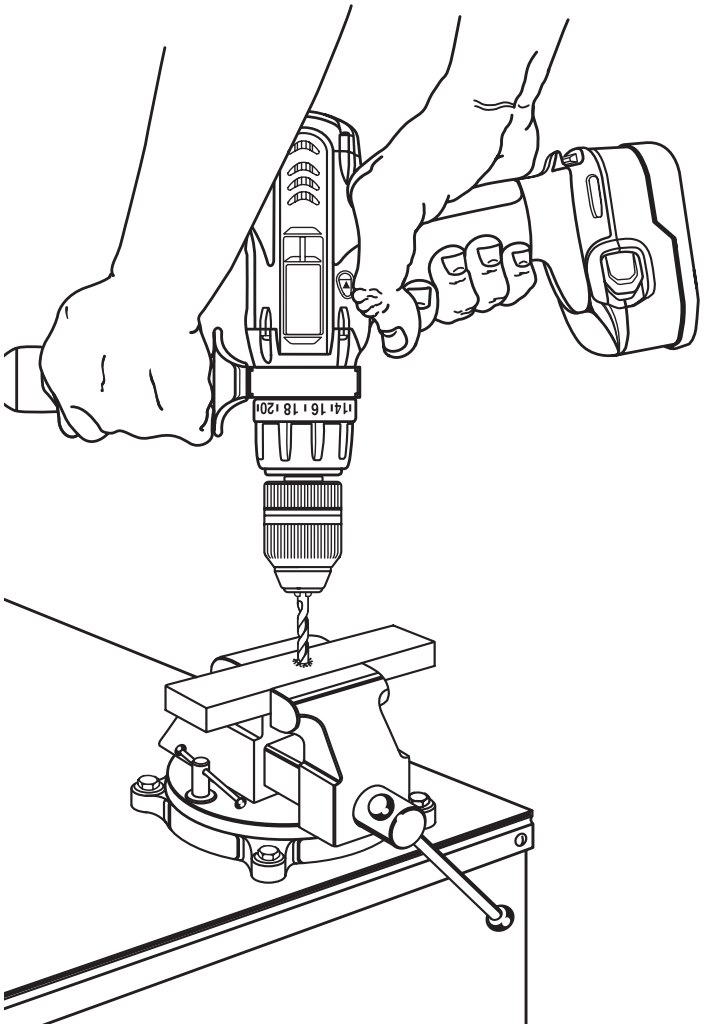

Fig. 15

OPERATION

TO ADJUST DRILLING OR HAMMER MODE

See Figure 16.

To adjust hammer drill to drilling or hammer operation, rotate mode selector in the direction of arrows as shown in Figure 16. For your convenience a hammer symbol and drill bit symbol have been molded into the selector.

⚠ WARNING:

Your hammer drill has not been designed for reverse hammering. Reverse hammering may damage your drill.

We recommend that you use carbide-tipped bits and select hammer mode when drilling in hard materials such as brick, tile, concrete, etc.
We recommend that you select normal drilling mode when drilling with twist drills, hole saws, etc. in steel and soft materials.

WOOD DRILLING

- For maximum performance, use high speed steel bits for wood drilling.
- Turn mode selector ring on hammer drill to normal drilling action.
- Begin drilling at a very low speed to prevent the bit from slipping off the starting point. Increase the speed as the drill bit bites into the material.
- When drilling through holes, place a block of wood behind the workpiece to prevent ragged or splintered edges on the back side of the hole.
- Do not lock the trigger on for jobs where your hammer drill may need to be stopped suddenly.

METAL DRILLING

- For maximum performance, use high speed steel bits for metal or steel drilling.
- Turn mode selector on hammer drill to normal drilling action.
- Begin drilling at a very low speed to prevent the bit from slipping off the starting point.
- Maintain a speed and pressure which allows cutting without overheating the bit. Applying too much pressure will:
  - Overheat the drill;
  - Wear the bearings;
  - Bend or burn bits; and
  - Produce off-center or irregular shaped holes.

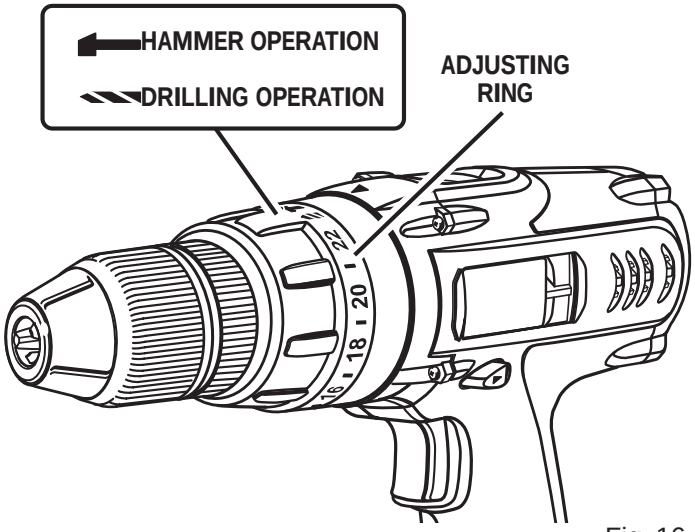

Fig. 16

- When drilling large holes in metal, we recommend that you drill with a small bit at first, then finish with a larger bit. Also, lubricate the bit with oil to improve drilling action and increase bit life.

MASONRY DRILLING

- For maximum performance use carbide-tipped masonry impact bits when drilling holes in brick, tile, concrete, etc.
- Turn mode selector on hammer drill to hammer mode.
- Apply light pressure and medium speed for best results in brick.
- Apply additional pressure and high speed for hard materials such as concrete.
- When drilling holes in tile, practice on a scrap piece to determine the best speed and pressure.

MAINTENANCE

⚠ WARNING:
When servicing use only identical RIDGID® replacement parts. Use of any other parts may create a hazard or cause product damage.

General

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, carbon dust, etc. that can damage, weaken, or destroy plastic.
Do not abuse power tools. Abusive practices can damage tool as well as workpiece.

⚠ WARNING:
Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc. come in contact with plastic parts. They contain chemicals that can damage, weaken or destroy plastic.

⚠ WARNING:
Do not attempt to modify this tool or create accessories not recommended for use with this tool. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

⚠ WARNING:
Always wear eye protection marked to comply with ANSI Z87.1. Failure to do so could result in dust, shavings, or loose particles being thrown into your eyes, resulting in possible serious injury.

CHUCK REMOVAL

See Figures 17, 18, and 19.
The chuck must be removed in order to use some accessories. To remove:

- Lock the switch trigger by placing the direction of rotation selector in center position. See *Figure 4.*
- Insert a 5/16 in. or larger hex key into the chuck of the drill and tighten the chuck jaws securely.
- Tap the hex key sharply with a mallet in a clockwise direction. See *Figure 17.* This will loosen the screw in the chuck for easy removal.

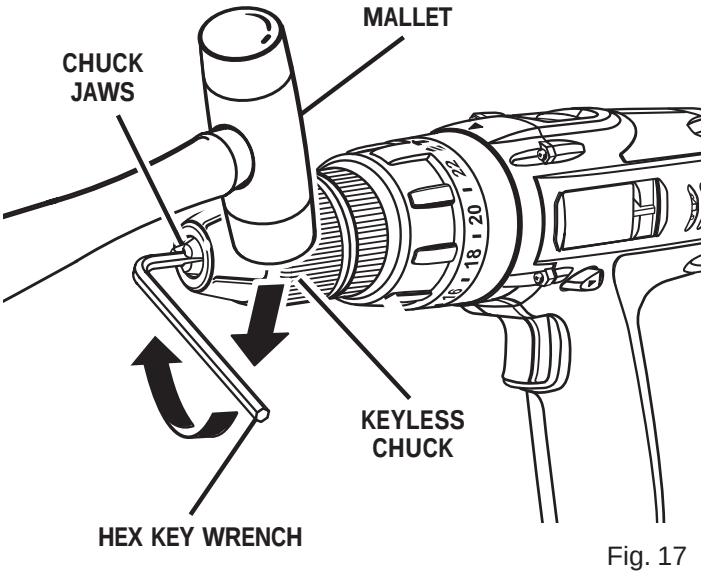

Fig. 17

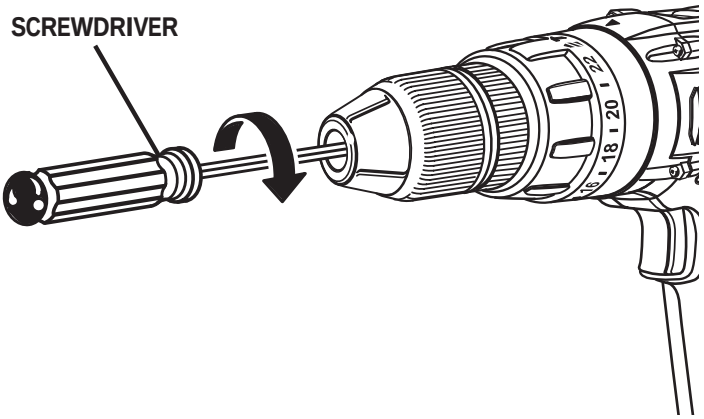

Fig. 18

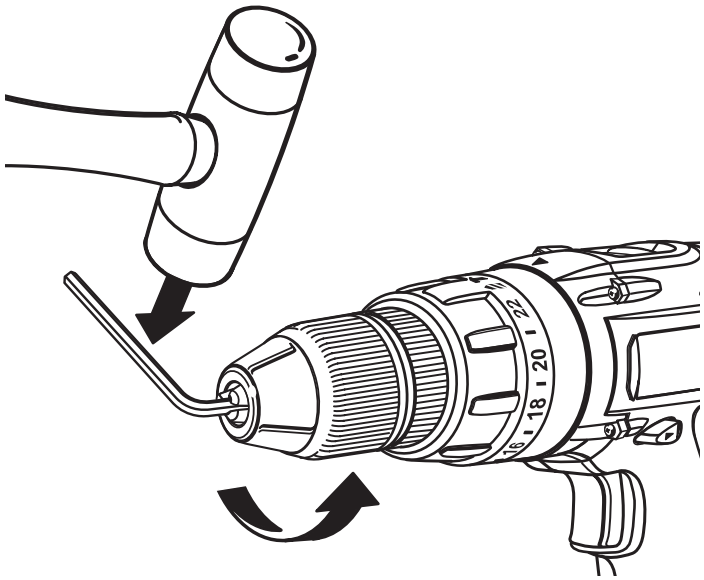
Fig. 19

- Open the chuck jaws and remove the hex key. Remove the chuck screw by turning it in a clockwise direction. *See Figure 18.*
  Note: The screw has left hand threads.
- Insert the hex key in the chuck and tighten chuck jaws securely. Tap sharply with a mallet in a counterclockwise direction. This will loosen the chuck on the spindle. It can now be unscrewed by hand. *See Figure 19.*

TO RETIGHTEN A LOOSE CHUCK

The chuck may become loose on spindle and develop a wobble. Periodically check chuck screw for tightness.
To tighten, follow these steps:

- Lock the switch trigger by placing the direction of rotation selector in center position. See *Figure 4.*
- Open the chuck jaws.
- Insert the hex key into the chuck and tighten chuck jaws securely. Tap the hex key sharply with a mallet in a clockwise direction. This will tighten the chuck on the spindle. *See Figure 17.*
- Open the chuck jaws and remove the hex key.
- Tighten the chuck screw.
  Note: The chuck screw has left hand threads.

BATTERIES

The battery pack for your tool is equipped with nickel-cadmium rechargeable batteries. Length of service from each charging will depend on the type of work you are doing.

The batteries in this tool have been designed to provide maximum trouble free life. However, like all batteries, they will eventually wear out. **Do not** disassemble battery pack and attempt to replace the batteries. Handling of these batteries, especially when wearing rings and jewelry, could result in a serious burn.

To obtain the longest possible battery life, we suggest the following:

- Store and charge your batteries in a cool area. Temperatures below 50°F or above 100°F will shorten battery life.
- Never store batteries in a discharged condition. Recharge them immediately after they are discharged.
- All batteries gradually lose their charge. The higher the temperature the quicker they lose their charge. If you store your tool for long periods of time without using it, recharge the batteries every month or two. This practice will prolong battery life.

BATTERY PACK REMOVAL AND PREPARATION FOR RECYCLING

⚠ WARNING:

Upon removal, cover the battery pack's terminals with heavy duty adhesive tape. Do not attempt to destroy or disassemble battery pack or remove any of its components. Nickel-cadmium batteries must be recycled or disposed of properly. Also, never touch both terminals with metal objects and/or body parts as short circuit may result. Keep away from children. Failure to comply with these warnings could result in fire and/or serious injury.

To preserve natural resources, please recycle or dispose of batteries properly.

This product contains nickel-cadmium batteries. Local, state or federal laws may prohibit disposal of nickel-cadmium batteries in ordinary trash.

Consult your local waste authority for information regarding available recycling and/or disposal options

WARRANTY

RIDGID® HAND HELD AND STATIONARY POWER TOOL

3 YEAR LIMITED SERVICE WARRANTY

Proof of purchase must be presented when requesting warranty service.
Limited to RIDGID® hand held and stationary power tools purchased 2/1/04 and after. This product is manufactured by One World Technologies, Inc. The trademark is licensed from RIDGID, Inc. All warranty communications should be directed to One World Technologies, Inc., attn: RIDGID Hand Held and Stationary Power Tool Technical Service at (toll free) 1-866-539-1710.

90-DAY SATISFACTION GUARANTEE POLICY

During the first 90 days after the date of purchase, if you are dissatisfied with the performance of this RIDGID® Hand Held and Stationary Power Tool for any reason you may return the tool to the dealer from which it was purchased for a full refund or exchange. To receive a replacement tool you must present proof of purchase and return all original equipment packaged with the original product. The replacement tool will be covered by the limited warranty for the balance of the 3 YEAR service warranty period.

WHAT IS COVERED UNDER THE 3 YEAR

LIMITED SERVICE WARRANTY

This warranty on RIDGID® Hand Held and Stationary Power Tools covers all defects in workmanship or materials and normal wear items such as brushes, chucks, motors, switches, cords, gears and even cordless batteries in this RIDGID® tool for three years following the purchase date of the tool. Warranties for other RIDGID® products may vary.

HOW TO OBTAIN SERVICE

To obtain service for this RIDGID® tool you must return it; freight prepaid, or take it in to an authorized service center for RIDGID® branded hand held and stationary power tools. You may obtain the location of the authorized service center nearest you by calling (toll free) 1-866-539-1710 or by logging on to the RIDGID® website at www.ridgid.com. When requesting warranty service, you must present the original dated sales receipt. The authorized service center will repair any faulty workmanship, and either repair or replace any part covered under the warranty, at our option, at no charge to you.

WHAT IS NOT COVERED

This warranty applies only to the original purchaser at retail and may not be transferred. This warranty only covers defects arising under normal usage and does not cover any malfunction, failure or defect resulting from misuse, abuse, neglect, alteration, modification or repair by other than an authorized service center for RIDGID® branded hand held and stationary power tools. Consumable accessories provided with the tool such as, but not limited to, blades, bits and sand paper are not covered.
RIDGID, INC. AND ONE WORLD TECHNOLOGIES, INC. MAKE NO WARRANTIES, REPRESENTATIONS OR PROMISES AS TO THE QUALITY OR PERFORMANCE OF ITS POWER TOOLS OTHER THAN THOSE SPECIFICALLY STATED IN THIS WARRANTY.

ADDITIONAL LIMITATIONS

To the extent permitted by applicable law, all implied warranties, including warranties of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, are disclaimed. Any implied warranties, including warranties of merchantability or fitness for a particular purpose, that cannot be disclaimed under state law are limited to three years from the date of purchase. One World Technologies, Inc. and Ridgid, Inc. are not responsible for direct, indirect, incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

One World Technologies, Inc.
Hwy. 8
Pickens, SC 29671

NOTES

OPERATOR'S MANUAL

1/2 in. 18 VOLT HAMMER DRILL

Model No. R841150

Customer Service Information:

For parts or service, contact your nearest RIDGID authorized service center. Be sure to provide all relevant information when you call or visit. For the location of the authorized service center nearest you, please call 1-866-539-1710 or visit us online at www.ridgid.com.

The model number of this tool is found on a plate attached to the motor housing. Please record the serial number in the space provided below. When ordering repair parts, always give the following information:

Model No. R841150

Serial No. _____

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1-05